### Commonwealth of Kentucky Environmental and Public Protection Cabinet

Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

**Final** 

## AIR QUALITY PERMIT Issued under 401 KAR 52:020

Permittee Name: Meritor Heavy Vehicle Braking Systems (USA),

Inc.

Mailing Address: 5212 & 5284 Highway 42 East

Carrollton, KY 41008

Source Name: Same as above Mailing Address: Same as above

**Source Location:** Same as above

Permit Number: V-05-041, Renewal

Source A. I. #: 710

**Activity #: APE20040002** 

**Review Type:** Title V/Operating/Synthetic Minor/Federally

**Enforceable** 

Source ID #: 21- 041 - 00026

**Regional Office:** Florence Reginal Office

38020 Veterans Memorial Drive, Suite 110

Florence, KY 41042 (859) 525-4923

County: Carroll

**Application** 

Complete Date: July 23, 2004 Issuance Date: January 8, 2007

**Revision Date:** 

**Expiration Date:** January 8, 2012

John S. Lyons, Director Division for Air Quality

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### **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

### **GROUP1**:

**Melt Shop Operations** 

**<u>Description:</u>** Melt shop operations consisting of the following:

EP# 08 Scrap Handling/Charging

EP# 01 Scrap Pre-heater

EP# 02 Induction Furnaces (x2)

EP# 09 Inoculation

EP #	Rated Capacity	<b>Construction Date</b>	<b>Control Equipment</b>
08	15 tph (Iron)	1/1/1979	
01	15 tph (Iron)	1/1/1979	4-Bagger Dust
02	12 tph (combined throughput, Iron)	11/1/1979	Collector
09	12 tph (Iron)	1/1/1979	

### **GROUP2:**

**Casting and Cooling Operations** 

**<u>Description</u>**: Casting and cooling operations consisting of the following:

EP# 12 Pouring Line (2 roof fans)

**EP# 13 Cooling Line (3 roof fans)** 

EP	Rated Capacity	<b>Construction Date</b>	<b>Control Equipment</b>
12	12 tph (Iron)		
12	43.2 lb/hr (Resin)	1/1/1979	None
12	580.8 lb/hr (Seacoal-net addition rate)		
13	12 tph (Iron)		
13	43.2 lb/hr (Resin)	1/1/1979	None
13	580.8 lb/hr (Seacoal-net addition rate)		

### **GROUP3:**

**Mold Making and Sand Handling Operations** 

**<u>Description</u>**: Mold making and sand handling operations consisting of the following:

EP# 14 Shakeout

**EP# 06 Return Sand Handling** 

**EP# 22 Return Sand Sorting** 

EP# 24 Sand Conveyor to Muller

EP# 26 Green Sand Muller

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP# 03 Green Sand Storage/Conveyor

EP# 19 Mold Making (Mold Pattern Release Agent)

EP# 20 Mold Making (Mold Machine)

**EP# 21 Mold Evacuation** 

EP	Rated Capacity	<b>Construction Date</b>	Control Equipment
14	12 tph (Iron)		
14	43.2 lb/hr (Resin)	1/1/1979	Schneible Wet Collector
14	580.8 lb/hr (Seacoal-net addition rate)		
06	114 tph (Sand)	1/1/1979	
22	114 tph (Sand)	1/1/1979	2 Bagger Dust Collector
24	95.58 tph (Sand)	1/1/1979	None
26	108 tph (Green Sand)	1/1/1979	Flex Kleen Dust Collector
03	108 tph (Green Sand)	1/1/1979	None
19	2.4 gal/hr (Release agent)	1/1/1979	None
20	12 tph (Iron)	1/1/1979	Schneible Wet Collector
21	120 Molds/hr	1/1/1979	Vacuum Filter

### **GROUP4:**

**Core Making Operations** 

**<u>Description</u>**: Core making operations consisting of the following:

EP# 31 Core Machine 1 EP# 32 Core Machine 2

EP	Rated Capacity	<b>Construction Date</b>	<b>Control Equipment</b>
31	1.74 tph (Core sand)	1/1/1979	Wet Scrubber
31	1.94 lb/hr (TEA)	1/1/1979	Wei Schubbei
32	1.74 tph (Core sand)	1/1/1979	Wet Scrubber
32	1.94 lb/hr (TEA)	1/1/1979	wei scrubber

### **GROUP5:**

**Cleaning Operations** 

**<u>Description</u>**: Cleaning operations consisting of the following:

EP# 04 Shotblaster

EP# 15 Stand Grinders (x4)

EP	Rated Capacity	<b>Construction Date</b>	Control Equipment
04	13 tph (shot)	11/1/1978	Panghorn Dust Collector
15	12 tph (iron)	1/1/1979	Panghorn Dust Collector

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **APPLICABLE REGULATIONS:**

For all groups except EP03 in Group 3:

401 KAR 59:010 New Process Operations

For all groups except EP19 in Group 3:

401 KAR 63:010 Fugitive Emissions

### 1. Operating Limitations:

a) Pursuant to 401 KAR 63:010, Section 3 (1), the permittee shall not cause, suffer, or allow any material to be handled, processed, transported, or stored, allow a building or its appurtenances to be constructed, altered, repaired, or demolished, or allow a road to be used without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions to prevent particulate matter from becoming airborne shall include, when applicable, as follows:

Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.

### **Compliance Demonstration:**

Surfaces that are subjected to vehicular or foot traffic shall be vacuumed, wet mopped, or otherwise maintained in accordance with a Division approved housekeeping plan. This plan shall be submitted within 60 days of issuance of the final permit.

b) See Source Wide Limitation on Section D (2).

### 2. Emission Limitations:

- a) Pursuant to 401 KAR 59:010
  - i. Section 3 (1), opacity shall not exceed 20%.
  - ii. Section 3 (2) hourly particulate emissions for each emission point shall not exceed the following limit:

For process rates up to 1,000 lbs/hr: E = 2.34

For process rates up to 60,000 lbs/hr:  $E = 3.59 P^{0.62}$ 

For process rates in excess of 60,000 lbs/hr:  $E = 17.31 P^{0.16}$ 

For the equations: E = rate of emission in lb/hr and P = process weight rate in tons/hr (monthly throughput in tons/monthly hours of operation).

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **Compliance Demonstration**:

- i. Compliance with hourly emission limit shall be determined as follows: Hourly Emission Rate (lb/hr) = (Monthly processing rate x Emission Factor as determined from AP-42 \*)/(Hours of operation per month) x (1-Control Efficiency)
  - \* If an Emission Factor other than that taken from AP-42 is used, documentation on how that Emission Factor was derived must be submitted to the Division's Central Office for approval.

The units for the parameters above are listed in the following table:

Scenarios	<b>Monthly Processing Rate</b>	<b>Emission Factor</b>	Hours of Operation
tons molten iron, sand,	tons/month	lbs/ton	hours/month
bond, or shotblast			
lbs resin or seacoal	lbs/month	lb/lb	hours/month

ii. Compliance with the opacity limits shall be demonstrated through the following methods: The permittee shall perform the monitoring and recordkeeping requirements listed under **4. Specific Monitoring Requirements** and **5.** 

### **Specific**

### **Recordkeeping Requirements** during all periods.

- b) See Section D for plant wide limits.
- c) Pursuant to 401 KAR 63:010, Section 3 (2), the Permittee shall not cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.

### 3. Testing Requirements:

- a) Group 3: None
- b) Group 1, 2, 4, & 5:
  - i. Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted at least once per life of this permit as required by the Division.
  - ii. The exhaust fans on the side of the building shall be tested for PM/PM10 emission within 180 days of the issuance of the final permit. The permittee must submit a test protocol sixty days prior to the test date. The testing will be a one time testing to quantify the emission. The permittee may use temporary stack and duct work to accomplish this task.

### 4. **Specific Monitoring Requirements:**

- a) The permittee shall monitor the monthly hours of operation and the total monthly input of raw materials of each processes unit at each emission point.
- b) For each stack, vent or control system:
  - i. Weekly observations of visible emissions during operation of associated equipment.
  - ii. Observations of visible emissions during all periods of control equipment

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

malfunction.

If visible emissions are seen during the observation, Method 9 shall be used to determine the opacity.

- iii. Annual Method 9 readings during operation of associated equipment.
- c) On an operating day basis, the Permittee shall inspect the above listed emission units for potential fugitive emissions. If there is a potential for fugitive emissions then reasonable precautions listed above shall be taken.
- d) On a monthly basis, the permittee shall monitor all materials containing HAP(s), each HAP, and total HAP(s) emissions.

### 5. Specific Recordkeeping Requirements:

- a) Monthly records shall be maintained of the total input of all raw materials and hours of operation of each process unit at each emission point.
- b) For each stack, vent or control system, a log shall be kept of all emission observations. Notation in the weekly log shall be made as follows:
  - i. Weekly observations of visible emissions during operation of associated equipment.
  - ii. Observations of visible emissions during all periods of control equipment malfunction.
    - If visible emissions are seen during the observation, Method 9 shall be used to determine the opacity.
  - iii. Annual Method 9 readings during operation of associated equipment.
- c) Recordkeeping consisting of all materials containing HAP's used with HAP content for each and total HAPs emissions shall be kept monthly. The total HAPs emissions individual and combination shall be summarized each month and a 12 month rolling total shall be calculated, recorded, and compared to the plant wide emission limitations as specified in Section D.
- d) The Permittee shall maintain a log of daily work practices and monitoring

completed as required by this permit. This log shall be maintained on-site in a form suitable for inspection. This log shall contain information on all controls (water and non-water application which includes but not limited to sweeping and debris collection etc.) applied to the affected units listed above.

### 6. **Specific Reporting Requirements:**

- a) Any exceedance of the opacity or particulate emission limits as stated in this permit shall be reported to the Division of Air Quality within 30 days of the exceedance.
- b) Semi-annual reports shall be sent to the Division's Florence Regional Office showing the monthly and 12 month rolling total HAP emissions as required in 5.c., **Specific Recordkeeping Requirements**, above. See also Section F(5).

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 7. Specific Control Equipment Operating Conditions:

- a) The 4 Bagger Dust Collector (EP08, 01, 02, 09), 2-Bagger Dust Collector (EP06 & 22), the Schneibler Wet Collector (EP14 & 20), Flex-Kleen Dust Collector (EP26), Vacuum Filter (EP21), wet scrubber (EP31 & 32), and Panghorn Dust Collector (EP04 & 15) shall be operated at all times when the associated emission units are in operation.
- b) The permittee shall maintain on site a daily log of the pressure drop across the baghouses, pressure drop and flowrate across scrubbers and ensure all parameters remain within the range recommended by the manufacturer and/or standard operating practices.
- c) Vacuum Filters shall be maintained and replaced according to manufacturer's recommendation.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **GROUP**:

### **Paint Booth Operations**

**<u>Description</u>**: Paint booth operations consisting of the following:

**EP# 50 Nutro Paint Booth** 

EP# 62 Cell 11 Paint Booth

EP# 63 MHFA A Paint Booth

**EP# 64 MHFA B Paint Booth** 

EP# 67 Drum 1 Paint Booth

EP# 65 018/222 Line

EP# 68 Drum Paint 2

EP# 69 Misc Wheel

EP	Rated Capacity	<b>Construction Date</b>	Control Equipment
50	276 gal/hr (Paint)	1/1/1988	Exhaust Filter
62	142.2 gal/hr (Paint)	3/1/1999	Exhaust Filter
63	142.2 gal/hr (Paint)	3/1/1997	Exhaust Filter
64	142.2 gal/hr (Paint)	1/1/1997	Exhaust Filter
67	142.2 gal/hr (Paint)	8/1/2000	Exhaust Filter
65	142.2 gal/hr (Paint)	8/1/2000	Exhaust Filter
68	142.2 gal/hr (Paint)	8/1/2000	Exhaust Filter
69	142.2 gal/hr (Paint)	5/1/2003	Exhaust Filter

### **APPLICABLE REGULATIONS:**

**401 KAR 59:010 New Process Operations** 

401 KAR 59:225 New Miscellaneous Metal Parts and Products Surface Coating Operations

### 1. Operating Limitations:

Pursuant to 401 KAR 59:225 Section 6(b), VOC content of the paint as applied shall not exceed 3.50 lbs/gallon at any paint lines.

#### **Compliance Demonstration:**

The type, density, percentage of VOC(s) based on MSDS sheet of the paint used at each spray booth, including the VOC content of the paint as applied, shall be recorded on an operating daily basis. Paint purchase records and related MSDS sheets of the applied paints shall be kept on site and made available for the review upon KYDAQ's request. For each paint applied, VOC content of the paint may be calculated as follows:

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### SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE **REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

VOC Content of the Paint Applied (lbs/gallon) = Density of Paint Applied (lbs/gallon) x Percentage of VOC in Paint based on MSDS sheet (%)

#### 2. **Emission Limitations:**

- Pursuant to 401 KAR 59:010
  - Section 3 (1), opacity shall not exceed 20%.
  - ii. Section 3 (2) hourly particulate emissions for each emission point shall not exceed the following limit:

For process rates up to 1,000 lbs/hr: E = 2.34 $E = 3.59 P^{0.62}$ 

For process rates up to 60,000 lbs/hr:

 $E = 17.31 P^{0.16}$ For process rates in excess of 60,000 lbs/hr:

For the equations: E = rate of emission in lb/hr and P = process weight rate intons/hr (monthly throughput in tons/monthly hours of operation).

### **Compliance Demonstration:**

i. Compliance with hourly emission limit shall be determined as follows:

Hourly Emission Rate (lb/hr) = [Monthly processing rate (gal/month) x Emission Factor as determined from AP-42 \* (lb/gal) / (Hours of operation per month (hrs/month)] x (1-Control Efficiency)

- If an Emission Factor other than that taken from AP-42 is used, documentation on how that Emission Factor was derived must be submitted to the Division's Central Office for approval.
- ii. Compliance with the opacity limits shall be demonstrated through the following methods: The permittee shall perform the monitoring and recordkeeping requirements listed under 4. Specific Monitoring Requirements and 5. Specific **Recordkeeping Requirements** during all periods.
- The permittee elects to have a combined paint booth VOC emission limit of 103 tpy to preclude the applicability of 401 KAR 51:017, Prevention of Significant Deterioration.

### **Compliance Demonstration:**

The following formula or equivalent may be used in calculating emissions of VOCs:

VOCs emitted monthly (tons/month) = [Monthly processing rate (gals/month) x Emission Factor as determined from AP-42 \* (lbs/gal)] x (1-Control Efficiency) /2000 (lbs/ton)

\* If an Emission Factor other than that taken from AP-42 is used, documentation

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

on how that Emission Factor was derived must be submitted to the Division's Central Office for approval.

c) See Section D for plant wide limits.

### 3. <u>Testing Requirements</u>:

None

### 4. **Specific Monitoring Requirements:**

- a) The permittee shall monitor monthly hours of operation and the total monthly usage rate of the paints used in each paint lines at each emission point.
- b) The permittee shall monitor the type, density, and percentage of VOC(s) based on MSDS sheet of the paint used at each paint lines daily.
- c) Calculate VOC content of the materials as applied daily.
- d) On a monthly basis, the permittee shall monitor the usage of all materials containing HAP(s) and percentage of HAP(s) in the material(s).
- e) For each stack, vent or control system:
  - i. Weekly observations of visible emissions during operation of associated equipment.
  - ii. Observations of visible emissions during all periods of control equipment malfunction.
    - If visible emissions are seen during the observation, Method 9 shall be used to determine the opacity.
  - iii. Annual Method 9 readings during operation of associated equipment.

### 5. **Specific Recordkeeping Requirements:**

- a) Monthly records shall be maintained of the total usage rate of the paints and hours of operation of each paint lines at each emission point.
- b) Daily records shall be maintained of the type, density, and percentage of VOC(s) based on MSDS sheet of the paint used at each paint line.
- c) Maintain a log of VOC content of the materials as applied daily.
- d) Recordkeeping consisting of all materials containing HAP's used with HAP content for each and total HAPs emissions shall be kept monthly. The total HAPs emissions individual and combination shall be summarized each month and a 12 month rolling total shall be calculated, recorded, and compared to the plant wide emission limitations as specified in Section D.
- e) For each stack, vent or control system, a log shall be kept of all emission observations. Notation in the weekly log shall be made of as follows:
  - i. Weekly observations of visible emissions during operation of associated equipment.
  - ii. Observations of visible emissions during all periods of control equipment

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

f) Records shall be kept of the exhaust filter's maintenance and replacement.

### **6.** Specific Reporting Requirements:

Any exceedance of the opacity or particulate emission limits as stated in this permit shall be reported to the Division of Air Quality within 30 days of the exceedance.

### 7. **Specific Control Equipment Operating Conditions:**

The Exhaust Filters shall be functional at all times of operation. They shall be changed and maintained pursuant to the manufacturer's recommendation.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **GROUP**:

**Miscellaneous Operations (fugitive)** 

**<u>Description</u>**: Fugitive miscellaneous operations consisting of the following:

EP# 39 Paved Haul Roads Unpaved Haul Roads

EP	Rated Capacity	<b>Construction Date</b>	<b>Control Equipment</b>
39	11.59 miles traveled/hr	11/1/1978	None
	0.37 miles traveled/hr		None

### **APPLICABLE REGULATIONS:**

**401 KAR 63:010 Fugitive Emissions** 

### 1. **Operating Limitations:**

Pursuant to 401 KAR 63:010, Section 3 (1), the Permittee shall not cause, suffer, or allow any material to be handled, processed, transported, or stored, allow a building or its appurtenances to be constructed, altered, repaired, or demolished, or allow a road to be used without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions to prevent particulate matter from becoming airborne shall include, when applicable, as follows:

- a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
- b) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts; and
- c) The maintenance of paved roadways in a clean condition.

### 2. <u>Emission Limitations</u>:

Pursuant to 401 KAR 63:010, Section 3 (2), the Permittee shall not cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.

### 3. Testing Requirements:

None

### 4. **Specific Monitoring Requirements:**

On a operating daily basis, the Permittee shall inspect the above listed emission units for potential fugitive emissions. If there is a potential for fugitive emissions then reasonable precautions listed above shall be taken.

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 5. **Specific Recordkeeping Requirements:**

The Permittee shall maintain a log of daily work practices and monitoring completed as required by this permit. This log shall be maintained on-site in a form suitable for inspection. This log shall contain information on all controls (water and non-water application which includes but not limited to sweeping and debris collection etc.) applied to the affected units listed above.

### **6.** Specific Reporting Requirements:

None

### 7. Specific Control Equipment Operating Conditions:

None

### **SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

### Description

### Generally Applicable Regulation

1. Ladle Pre-Heaters x3 (EP# 10)	None
2. New Sand Hopper (EP# 18)	401 KAR 63:010
3. Bond Hopper (EP# 23)	401 KAR 63:010
4. Bond Conveyor (EP# 25)	401 KAR 63:010
5. Core Sand Hopper (EP# 27)	401 KAR 63:010
6. Core Sand Feed Hopper w/ Electric Heater (EP# 28)	401 KAR 63:010
7. Core Sand Mixer (EP# 05)	401 KAR 59:010
	401 KAR 63:010
	401 KAR 63:020
8. Core Machine Sand Hoppers x2 (EP# 29 & 30)	401 KAR 63:010
9. Core Release Agent (EP#33)	None
10. Scrap Storage Piles (EP# 07)	401 KAR 63:010
11. Landfill (EP# 40)	401 KAR 63:010
12. New Sand Railcar Unloading	401 KAR 63:010
13. New Sand Silo (EP# 17)	401 KAR 59:010
14. New Bond Silo (EP# 16)	401 KAR 59:010
15. Diesel Tank (EP# 38)	None
16. Gasoline Tank (EP# 52)	None
17. Pattern Spray Tank (EP# 54)	None
18. Kerosene Tank (EP# 55)	None
19. Hydraulic Oil Tanks x2 (EP# 56 & 57)	None
20. Used Hydraulic Oil Tanks x2 (EP# 58 & 59)	None
21. Parts Washers x2 (EP#34 & 53)	None
22. Pepset Molding (EP#88)	None
23. Air Make-up Units (EP#41-48: 0.037 MMft <sup>3</sup> /hr;	None
EP#84-86: 0.01 MMft <sup>3</sup> /hr)	

## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. The total raw materials charged to two induced furnaces (EP#2) shall not exceed 12 tons per hour (self-imposed limit, two furnaces are considered as a group).

### **Compliance Demonstration:**

The permittee shall monitor and keep records of the types, total weight of raw material charged to the two furnaces and total operational hours of the two furnaces daily. The hourly charge rate shall be based on a 24-hour average basis.

3. To preclude major source status for HAPs, the total weight of iron produced shall not exceed 70,000 tpy in any consecutive twelve (12) month period.

### **Compliance Demonstration:**

The permittee shall monitor and keep records of the weight of gray iron produced monthly source wide. The hourly iron production rate shall base on a 24-hour average basis.

4. Pursuant to 401KAR 52:030, plantwide emissions of individual HAPs shall not exceed 9 tons/yr each and plantwide emissions of combination HAPS shall not exceed 22.5 tons/yr (Preclude major HAP source).

### **Compliance Demonstration:**

The following formula or equivalent may be used in calculating emissions of HAPs:

HAPs emitted monthly (tons/month) = $\sum$ [(Monthly processing rate x Emission Factor as determined from AP-42 \*) x (1-Control Efficiency)/2000 (lbs/ton)]

\* If an Emission Factor other than that taken from AP-42 is used, documentation on how that Emission Factor was derived must be submitted to the Division's Central Office for approval.

The units for the parameters above are listed in the following table:

Scenarios	<b>Monthly Processing Rate</b>	Emission Factor
Ton molten gray iron	tons/month	lbs/ton
Ton Shotblast/metal melted	tons/month	lbs/ton
lbs resin or seacoal or TEA	lbs/month	lb/lb
Gallons paint applied	gallons/month	lbs/gallon

5. The PM/PM10 and VOC emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

### **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

## SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

- 1. Pursuant to Section 1b (IV)1 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].
- 3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit:
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference

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## SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

in 401 KAR 52:020, Section 26].

- 6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Section 1b (V) 3, 4. of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].
- 9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

## SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Florence Regional Office 8020 Veterans Memorial Drive, Suite 110 Florence, KY 41042 U.S. EPA Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth St. Atlanta, GA 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

- 10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
- 11. Pursuant to 401 KAR 50:045, performance testing required by the permit shall be conducted according to the timeline listed in 401 KAR 50:045. The division requires that results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

### **SECTION G - GENERAL PROVISIONS**

### (a) General Compliance Requirements

- 1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020 Section 26].
- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

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### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

- 6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].
- 7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].
- 8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].
- 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
- 11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

- 16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
  - a. Applicable requirements that are included and specifically identified in the permit and
  - b. Non-applicable requirements expressly identified in this permit.
- 17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
- (b) Permit Expiration and Reapplication Requirements
- 1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- 2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

### (c) <u>Permit Revisions</u>

- 1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided

### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

- (d) None
- (e) Acid Rain Program Requirements
- 1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- (f) <u>Emergency Provisions</u>
- 1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b.The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - d.Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
  - e. This requirement does not relieve the source of other local, state or federal notification requirements.
- 2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].
- (g) Risk Management Provisions
- 1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

RMP Reporting Center P.O. Box 3346 Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

### (h) Ozone depleting substances

- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
  - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

### **SECTION H – ALTERNATE OPERATION SCENARIOS**

None

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### **SECTION I - COMPLIANCE SCHEDULE**

None